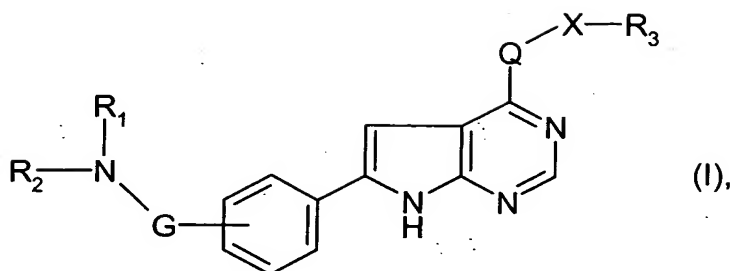


What is claimed is:

1. A compound of formula I



wherein

R_1 and R_2 are each independently of the other hydrogen, unsubstituted or substituted alkyl or cycloalkyl, a heterocyclic radical bonded via a ring carbon atom, or a radical of the formula $R_4-Y-(C=Z)-$ wherein R_4 is unsubstituted, mono- or disubstituted amino or a heterocyclic radical, Y is either not present or lower alkyl and Z is oxygen, sulfur or imino, with the proviso that R_1 and R_2 are not both hydrogen; or

R_1 and R_2 together with the nitrogen atom to which they are attached form a heterocyclic radical;

R_3 is a heterocyclic radical or an unsubstituted or substituted aromatic radical;

G is C_1 - C_7 -alkylene, $-C(=O)-$, or C_1 - C_6 -alkylene- $C(=O)-$ wherein the carbonyl group is attached to the NR_1R_2 moiety;

Q is $-NH-$ or $-O-$, with the proviso that Q is $-O-$ if G is $-C(=O)-$ or C_1 - C_6 -alkylene- $C(=O)-$; and

X is either not present or C_1 - C_7 -alkylene, with the proviso that a heterocyclic radical R_3 is bonded via a ring carbon atom if X is not present;

or a salt thereof.

2. A compound of formula I according to claim 1, wherein

R_1 and R_2 are each independently of the other hydrogen, unsubstituted or substituted alkyl or cycloalkyl, a heterocyclic radical bonded via a ring carbon atom, or a radical of the formula $R_4-Y-(C=Z)-$ wherein R_4 is unsubstituted, mono- or disubstituted amino or a

heterocyclic radical, Y is either not present or lower alkyl and Z is oxygen or sulfur or imino, with the proviso that R₁ and R₂ are not both hydrogen; or

R₁ and R₂ together with the nitrogen atom to which they are attached form a heterocyclic radical;

R₃ is a heterocyclic radical or an unsubstituted or substituted aromatic radical;

G is C₁-C₇-alkylene;

Q is -NH- or -O-; and

X is either not present or C₁-C₇-alkylene, with the proviso that a heterocyclic radical R₃ is bonded via a ring carbon atom if X is not present;
or a salt thereof.

3. A compound of formula I according to claim 1, wherein

R₁ and R₂ are each independently of the other hydrogen, unsubstituted or substituted alkyl or cycloalkyl, a heterocyclic radical bonded via a ring carbon atom, or a radical of the formula R₄-Y-(C=Z)- wherein R₄ is unsubstituted, mono- or disubstituted amino or a heterocyclic radical, Y is either not present or lower alkyl and Z is oxygen, sulfur or imino, with the proviso that R₁ and R₂ are not both hydrogen; or

R₁ and R₂ together with the nitrogen atom to which they are attached form a heterocyclic radical;

R₃ is a heterocyclic radical or an unsubstituted or substituted aromatic radical;

G is C₁-C₇-alkylene;

Q is -NH-; and

X is either not present or C₁-C₇-alkylene, with the proviso that a heterocyclic radical R₃ is bonded via a ring carbon atom if X is not present;
or a salt thereof.

4. A compound of formula I according to claim 3, wherein

R₁ and R₂ are each independently of the other hydrogen, unsubstituted or substituted lower alkyl or C₃-C₆ cycloalkyl, a heterocyclic radical bonded via a ring carbon atom and containing up to 20 carbon atoms, or a radical of the formula R₄-Y-(C=Z)- wherein R₄ is unsubstituted, mono- or disubstituted amino or a heterocyclic radical containing up to 20 carbon atoms, Y is either not present or lower alkyl and Z is oxygen, with the proviso that R₁ and R₂ are not both hydrogen; or

R_1 and R_2 together with the nitrogen atom to which they are attached form a heterocyclic radical containing up to 20 carbon atoms;

R_3 is a heterocyclic radical containing up to 20 carbon atoms or an unsubstituted or substituted aromatic radical having up to 20 carbon atoms;

G is C_1 - C_3 -alkylene;

Q is -NH-; and

X is either not present or C_1 - C_3 -alkylene, with the proviso that a heterocyclic radical R_3 is bonded via a ring carbon atom if X is not present;
or a salt thereof.

5. A compound of formula I according to claim 1, wherein

R_1 and R_2 are each independently of the other hydrogen, lower alkyl, hydroxy-lower alkyl, N,N-di-lower alkylamino-lower alkyl, morpholinyl-lower alkyl, tetrahydropyranyl, or a radical of the formula R_4 -Y-(C=Z)- wherein R_4 is di-lower alkylamino, pyrrolidinyl, piperidyl, lower alkyl-piperazinyl, morpholinyl or pyridyl, Y is either not present or lower alkyl and Z is oxygen, with the proviso that R_1 and R_2 are not both hydrogen; or

R_1 and R_2 together with the nitrogen atom to which they are attached form a radical selected from the group consisting of pyrrolidinyl, piperidyl, piperazinyl, lower alkyl-piperazinyl, di-lower alkyl-piperazinyl and morpholinyl;

R_3 is phenyl, benzodioxolyl, pyridyl substituted by hydroxy or lower alkoxy, indolyl substituted by halogen and lower alkyl, or phenyl substituted by one or more radicals selected independently of one another from the group consisting of lower alkyl, hydroxy, lower alkoxy, halogen and benzyloxy;

G is $-CH_2-$ or $-C(=O)-$;

Q is -NH- or -O-, with the proviso that Q is -O- if G is $-C(=O)-$; and

X is either not present, $-CH_2-$ or $-CH(CH_3)-$, with the proviso that substituted pyridyl or indolyl R_3 is bonded via a ring carbon atom if X is not present;
or a salt thereof.

6. A compound of formula I according to claim 3, wherein

R_1 and R_2 are each independently of the other hydrogen, lower alkyl, hydroxy-lower alkyl, or a radical of the formula R_4 -Y-(C=Z)- wherein R_4 is di-lower alkylamino, pyrrolidinyl, piperidyl,

lower alkyl-piperazinyl, morpholinyl or pyridyl, Y is either not present or lower alkyl and Z is oxygen, with the proviso that R₁ and R₂ are not both hydrogen; or

R₁ and R₂ together with the nitrogen atom to which they are attached form a radical selected from the group consisting of pyrrolidinyl, piperidyl, piperazinyl, lower alkyl-piperazinyl, di-lower alkyl-piperazinyl and morpholinyl;

R₃ is phenyl, benzodioxolyl, pyridyl substituted by hydroxy or lower alkoxy, or phenyl substituted by one or more radicals selected independently of one another from the group consisting of lower alkyl, hydroxy, lower alkoxy, halogen and benzyloxy;

G is -CH₂-;

Q is -NH-; and

X is either not present, -CH₂- or -CH(CH₃)-, with the proviso that substituted pyridyl R₃ is bonded via a ring carbon atom if X is not present;

or a salt thereof.

7. A compound of formula I according to claim 1, selected from the group consisting of (3-chloro-4-fluoro-phenyl)-(6-{4-[(tetrahydro-pyran-4-ylamino)-methyl]-phenyl}-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-amine;

(3-chloro-4-fluoro-phenyl)-(6-{4-[(2-morpholin-4-yl-ethylamino)-methyl]-phenyl}-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-amine;

N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7H-pyrrolo[2,3-d]pyrimidin-6-yl]-benzyl}-N',N'-diethyl-ethane-1,2-diamine;

(3-chloro-4-fluoro-phenyl)-{6-[4-(isopropylamino-methyl)-phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-amine;

(6-{4-[(2-morpholin-4-yl-ethylamino)-methyl]-phenyl}-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-((R)-1-phenyl-ethyl)-amine;

((R)-1-phenyl-ethyl)-(6-{4-[(tetrahydro-pyran-4-ylamino)-methyl]-phenyl}-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-amine;

N,N-diethyl-N'-{4-[4-((R)-1-phenyl-ethylamino)-7H-pyrrolo[2,3-d]pyrimidin-6-yl]-benzyl}-ethane-1,2-diamine;

{6-[4-(tert-butylamino-methyl)-phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-((R)-1-phenyl-ethyl)-amine;

{6-[4-(isopropylamino-methyl)-phenyl]-7H-pyrrolo[2,3-d]pyrimidin-4-yl)-((R)-1-phenyl-ethyl)-amine;

[6-(4-ethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;
 [6-(4-methylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;
 (3-methoxy-benzyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-methoxy-benzyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 {6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-(3-methoxy-benzyl)-amine;
 (3-methyl-benzyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-methyl-benzyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 [6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-(3-methyl-benzyl)-amine;
 [6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-(3-methyl-benzyl)-amine;
 (3-methyl-benzyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-methyl-benzyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 {6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-(3-methyl-benzyl)-amine;
 benzo[1,3]dioxol-5-yl-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (6-methoxy-pyridin-3-yl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 5-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-1*H*-pyridin-2-one;
 (6-methoxy-pyridin-3-ylmethyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (6-methoxy-pyridin-3-ylmethyl)-{6-[4-(morpholin-4-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (6-methoxy-pyridin-3-ylmethyl)-{6-[4-(dimethylamino-methyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-methoxy-pyridin-4-ylmethyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(2-methoxy-pyridin-4-ylmethyl)-{6-[4-(morpholin-4-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-methoxy-pyridin-4-ylmethyl)-{6-[4-(dimethylamino-methyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-methoxy-pyridin-4-ylmethyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 5-({6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-methyl)-1H-pyridin-2-one;
 5-({6-[(4-(dimethylamino-methyl)-phenyl)-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-methyl}-1H-pyridin-2-one;
 5-({6-[4-(4-morpholin-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-methyl)-1H-pyridin-2-one;
 4-({6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-methyl)-1H-pyridin-2-one;
 4-({6-[4-(4-morpholin-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-methyl)-1H-pyridin-2-one;
 4-({6-[(4-(dimethylamino-methyl)-phenyl)-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-methyl}-1H-pyridin-2-one;
 4-({6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-methyl)-1H-pyridin-2-one;
 (2-methoxy-pyridin-4-yl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2-methoxy-pyridin-4-yl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-methoxy-pyridin-4-yl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 4-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7H-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-1H-pyridin-2-one;
 (1-phenyl-ethyl)-[6-(4-piperazin-1-ylmethyl-phenyl)-7H-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine
 and pharmaceutically acceptable salts thereof.

8. A compound of formula I according to claim 1, selected from the group consisting of

(4-ethyl-piperazin-1-yl)-{4-[4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-phenyl}-methanone;
 (4-methyl-piperazin-1-yl)-{4-[4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-phenyl}-methanone;
 {4-[4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-phenyl}-morpholin-4-yl-methanone;
 4-[4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-*N,N*-dimethylbenzamide;
 and pharmaceutically acceptable salts thereof.

9. A compound of formula I according to claim 1, selected from the group consisting of
 6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidine;
 6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidine;
 4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidine;
 {4-[4-(4-fluoro-2-methyl-1*H*-indol-5-yloxy)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-dimethylamine;
 and pharmaceutically acceptable salts thereof.

10. A compound of formula I according to claim 3, selected from the group consisting of
 (3-chloro-4-fluoro-phenyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-4-fluoro-phenyl)-[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-4-fluoro-phenyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (3-chloro-4-fluoro-phenyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-4-fluoro-phenyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(3-chloro-4-fluoro-phenyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-{6-[4-(3,5-dimethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

((*R*)-1-phenyl-ethyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

((*R*)-1-phenyl-ethyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

{6-[4-(3,5-dimethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-((*R*)-1-phenyl-ethyl)-amine;

(4-benzyloxy-phenyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(4-benzyloxy-phenyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(4-benzyloxy-phenyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(4-benzyloxy-phenyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(4-benzyloxy-phenyl)-[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(4-benzyloxy-phenyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(4-benzyloxy-phenyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(4-benzyloxy-phenyl)-{6-[4-(3,5-dimethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

[6-(3-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

[6-(3-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

{6-[3-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

((*R*)-1-phenyl-ethyl)-[6-(3-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

{6-[3-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

((*R*)-1-phenyl-ethyl)-[6-(3-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

[6-(3-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

{6-[3-(3,5-dimethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-((*R*)-1-phenyl-ethyl)-amine;

(3-chloro-4-fluoro-phenyl)-[6-(3-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-[6-(3-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-{6-[3-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(3-chloro-4-fluoro-phenyl)-[6-(3-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-{6-[3-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;

(3-chloro-4-fluoro-phenyl)-[6-(3-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(3-chloro-4-fluoro-phenyl)-[6-(3-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

N-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-piperidin-1-yl-acetamide;
N-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-pyrrolidin-1-yl-acetamide;
 2-morpholin-4-yl-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;
 2-(4-methyl-piperazin-1-yl)-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;
 2-dimethylamino-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;
 2-(4-ethyl-piperazin-1-yl)-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;
N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-dimethylamino-acetamide;
N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-(4-ethyl-piperazin-1-yl)-acetamide;
N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-morpholin-4-yl-acetamide;
N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-piperidin-1-yl-acetamide;
N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-(4-methyl-piperazin-1-yl)-acetamide;
N-{4-[4-(4-benzyloxy-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-dimethylamino-acetamide;
N-{4-[4-(4-benzyloxy-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-(4-methyl-piperazin-1-yl)-acetamide;
N-{4-[4-(4-benzyloxy-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-piperidin-1-yl-acetamide;
N-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-3-piperidin-1-yl-propionamide;
 3-diethylamino-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-propionamide;

4-dimethylamino-*N*-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-butyramide;

pyridine-2-carboxylic acid 4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzylamide;

N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-3-diethylamino-propionamide;

pyridine-2-carboxylic acid 4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzylamide;

N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-4-dimethylamino-butyramide;

N-{4-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-3-piperidin-1-yl-propionamide;

2-dimethylamino-*N*-{3-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;

2-(4-methyl-piperazin-1-yl)-*N*-{3-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-acetamide;

N-{3-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-dimethylamino-acetamide;

N-{3-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-(4-methyl-piperazin-1-yl)-acetamide;

N-{3-[4-(3-chloro-4-fluoro-phenylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-2-piperidin-1-yl-acetamide;

2-methyl-5-{6-[3-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-phenol;

5-[6-(3-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-2-methyl-phenol;

2-methoxy-5-{6-[3-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-phenol;

5-[6-(3-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-2-methoxy-phenol;

5-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-2-methyl-phenol;

2-methyl-5-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-phenol;

5-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-2-methoxy-phenol;
 2-methoxy-5-[6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-phenol;
 2-methoxy-5-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-phenol;
 [(*R*)-1-(4-chloro-phenyl)-ethyl]-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 [(*R*)-1-(4-chloro-phenyl)-ethyl]-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 [(*R*)-1-(4-chloro-phenyl)-ethyl]-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-phenyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine hydrochloride;
 (3-chloro-phenyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine dihydrochloride;
 (3-chloro-phenyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine hydrochloride;
 2-((2-hydroxy-ethyl)-{4-[4-((*R*)-1-phenyl-ethylamino)-7*H*-pyrrolo[2,3-*d*]pyrimidin-6-yl]-benzyl}-amino)-ethanol;
 (3-chloro-benzyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (3-chloro-benzyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-benzyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-benzyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-benzyl)-[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-benzyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-chloro-benzyl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-chloro-benzyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2-chloro-benzyl)-{6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-chloro-benzyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(2-chloro-benzyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2-chloro-benzyl)-[6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2-chloro-benzyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2-chloro-benzyl)-[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-[4-(4-ethyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (2,5-dichloro-benzyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 [6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-(3-methoxy-benzyl)-amine;
 [6-(4-diethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-(3-methoxy-benzyl)-amine;
 (3-methoxy-benzyl)-[6-(4-pyrrolidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (3-methoxy-benzyl)-[6-(4-piperidin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 benzo[1,3]dioxol-5-yl-[6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 benzo[1,3]dioxol-5-yl-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 benzo[1,3]dioxol-5-yl-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;
 (6-methoxy-pyridin-3-yl)-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine;

(6-methoxy-pyridin-3-yl)-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (6-methoxy-pyridin-3-yl)-{6-[4-(dimethylamino-methyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 (2-methoxy-pyridin-4-yl)-{6-[4-(dimethylamino-methyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl}-amine;
 5-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-1*H*-pyridin-2-one;
 5-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-1*H*-pyridin-2-one;
 5-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-1*H*-pyridin-2-one;
 4-[6-(4-morpholin-4-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-1*H*-pyridin-2-one;
 4-[6-(4-dimethylaminomethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino]-1*H*-pyridin-2-one;
 4-{6-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-ylamino}-1*H*-pyridin-2-one;
 and pharmaceutically acceptable salts thereof.

11. A compound of formula I selected from ((*R*)-1-phenyl-ethyl)-[6-(4-piperazin-1-ylmethyl-phenyl)-7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl]-amine.

12. A compound of formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 for use in a method for the treatment of the human or animal body.

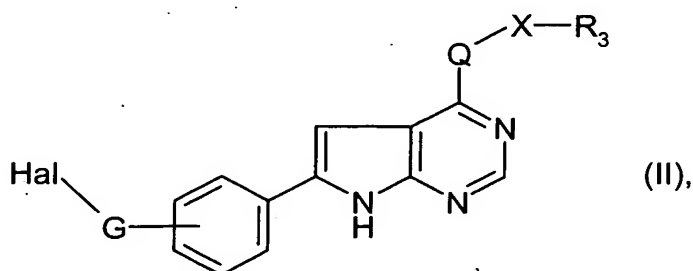
13. A pharmaceutical composition comprising a compound of formula I or a pharmaceutically acceptable salt thereof according to claim 1, together with at least one pharmaceutically acceptable carrier.

14. Use of a compound of formula I according to claim 1, or a pharmaceutically acceptable salt thereof, for the preparation of a pharmaceutical composition for the treatment of a disease.

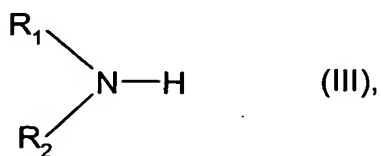
15. Use of a compound of formula I according to claim 1, or a pharmaceutically acceptable salt thereof, for the preparation of a pharmaceutical composition for the treatment of a disease which responds to an inhibition of a protein tyrosine kinase.

16. A process for the preparation of a compound of formula I according to claim 1 or of a salt of such a compound; characterized in that

a) in order to prepare a compound of formula I, wherein G is C₁-C₇-alkylene and wherein R₁ and R₂ are each independently of the other hydrogen, unsubstituted or substituted alkyl or cycloalkyl, or a heterocyclic radical bonded via a ring carbon atom, with the proviso that R₁ and R₂ are not both hydrogen, or wherein R₁ and R₂ together with the nitrogen atom to which they are attached form a heterocyclic radical, a compound of the formula II



wherein Hal is halogen, G is C₁-C₇-alkylene and R₃, Q and X have the meanings as defined for a compound of formula I according to claim 1, is reacted with a compound of the formula III

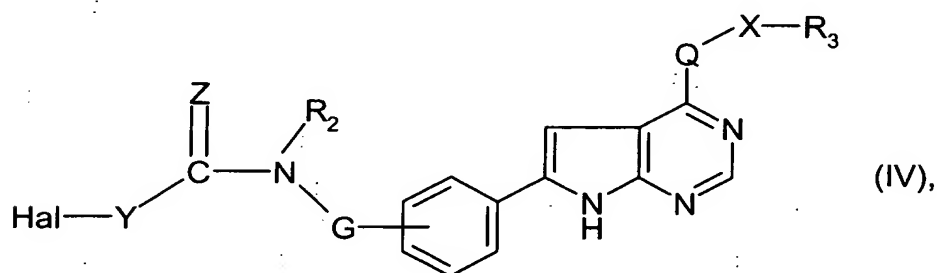


wherein R₁ and R₂ are each independently of the other hydrogen, unsubstituted or substituted alkyl or cycloalkyl, or a heterocyclic radical bonded via a ring carbon atom, with

the proviso that R_1 and R_2 are not both hydrogen, or wherein R_1 and R_2 together with the nitrogen atom to which they are attached form a heterocyclic radical;

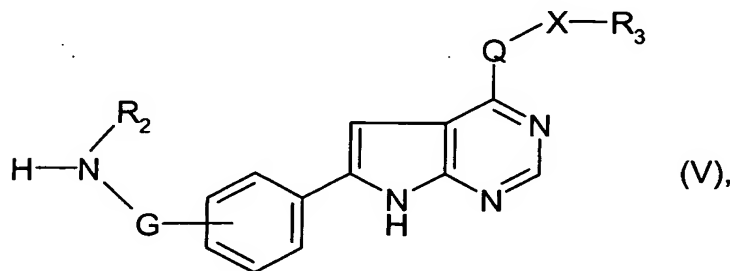
b) in order to prepare a compound of formula I, wherein G is C_1 - C_7 -alkylene and wherein R_1 is a radical of the formula R_4 -Y-(C=Z)- wherein R_4 is unsubstituted, mono- or disubstituted amino or a heterocyclic radical, Y is either not present or lower alkyl and Z is oxygen or sulfur,

(i) a compound of the formula IV

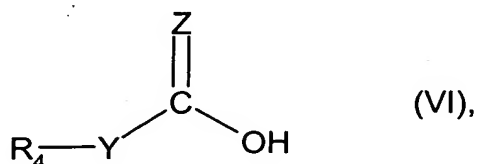


wherein Hal is halogen, G is C_1 - C_7 -alkylene, Z is oxygen and the remaining substituents and symbols have the meanings as defined for a compound of formula I according to claim 1, is reacted with a compound of the formula R_4 -H wherein R_4 is unsubstituted, mono- or disubstituted amino or a heterocyclic radical containing at least one nitrogen ring atom wherein the heterocyclic radical is attached to the hydrogen atom of R_4 -H via a nitrogen ring atom, or

(ii) a compound of the formula V



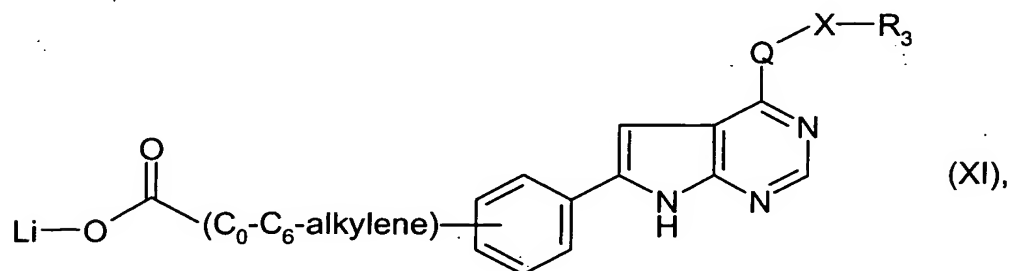
wherein G is C₁-C₇-alkylene and the remaining substituents and symbols have the meanings as defined for a compound of formula I according to claim 1, is reacted with a compound of the formula VI



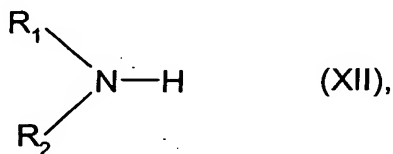
wherein R₄ and Y have the meanings as defined for a compound of formula I according to claim 1 and Z is oxygen,

whereby a compound of formula I which results from process b) (i) or (ii) is optionally converted into the respective compound wherein Z is sulfur;

c) in order to prepare a compound of formula I, wherein G is -C(=O)- or C₁-C₆-alkylene-C(=O)- wherein the carbonyl group is attached to the NR₁R₂ moiety, a compound of formula XI



wherein the substituents and symbols have the meanings as defined for a compound of formula I, is reacted with a compound of formula XII



wherein R₁ and R₂ have the meanings as defined for a compound of formula I; or

d) in order to prepare a compound of formula I, wherein G is C₁-C₇-alkylene, a compound of formula I, wherein G is -C(=O)- or C₁-C₆-alkylene-C(=O)- wherein the carbonyl group is attached to the NR₁R₂ moiety, is reacted with a reducing agent to produce the corresponding compound in which G is C₁-C₇-alkylene;

whereby functional groups which are present in the starting compounds of processes a) to d) and are not intended to take part in the reaction, are present in protected form if necessary, and protecting groups that are present are cleaved, whereby the said starting compounds may also exist in the form of salts provided that a salt-forming group is present and a reaction in salt form is possible;

and, if so desired, a compound of formula I thus obtained is converted into another compound of formula I, a free compound of formula I is converted into a salt, an obtained salt of a compound of formula I is converted into the free compound or another salt, and/or a mixture of isomeric compounds of formula I is separated into the individual isomers.